DEP7007 Forms (AI, J, N and V)

#### DEP7007AI **Additional Documentation** Division for Air Quality Administrative Information Section AI.1: Source Information Additional Documentation attached 300 Sower Boulevard Frankfort, KY 40601 Section AI.2: Applicant Information (502) 564-3999 Section AI.3: Owner Information Section AI.4: Type of Application Section AI.5: Other Required Information Section AI.6: Signature Block Section AI.7: Notes, Comments, and Explanations Source Name: **Buffalo Trace Distillery, Inc.** KY EIS (AFS) #: 21-073-00009 Permit #: V-12-056 Agency Interest (AI) ID: 1373 Date: 10/4/2019 Section AI.1: Source Information Physical 113 Great Buffalo Trace Street: Location County: Franklin Frankfort City: Zip Code: 40601 Address: Street or Same as physical address Mailing P.O. Box: Address: City: Zip Code: State: **Standard Coordinates for Source Physical Location** -84.871° E (decimal degrees) 38.216694° N (decimal degrees) Longitude: Latitude: Distilleries Primary (NAICS) Category: **Primary NAICS #:** 312140

Classification (SIC	) Category:	Distilled and Blend	led Liquo	ors		Primary SIC #:	2085		
conducted at this site:  conducted at this site:  columns and conducted bourbon are store			sers. The ro	esulting liquid is ses for aging. Th	s stored e spent	ground, and introduced to mask in tanks, transferred to barrele grain is sold as distiller's dried k and sent to the bottling area	s for aging, and/or sent to d grain. Beverage ingredie	the bottling area for packagin	ng. Barrels of
Description of Area Surrounding Approximate	☐ Rural Area ☐ Urban Area	☐ Industrial Pa	_	Residential Are		Is any part of the source located on federal land?	☐ Yes ✓ No	Number of Employees:	474
distance to nearest residence or commercial	Adjacer	nt		Property Area:	430	0 Acres	Is this source portable?	☐ Yes ✓	No
	What o	ther environmenta	l permits	s or registratio	ons do	es this source currently ho	old or need to obtain i	n Kentucky?	
NPDES/KPDES:	Currently Ho	ld 🗌	Need		N/A				
Solid Waste:	Currently Ho	ld 🗆	Need	<b>✓</b>	N/A				
RCRA:	Currently Ho	ld 🔲	Need	1	N/A				
UST:	Currently Ho	ld 🗆	Need	<b>7</b>	N/A				
Type of Regulated Waste	Mixed Waste	Generator	4	Generator		Recycler	Other:		
Activity:	U.S. Importer	of Hazardous Waste		Transporter		☐ Treatment/Storage/Disp	osal Facility	□ N/A	

Section AI.2: Ap	plicant Informatio	on								
Applicant Name:	Buffalo Trace Distiller	ry								
Title: (if individual)										
Mailing Address:	Street or P.O. Box: 113 Great Buffalo Trace									
Maning Addi Css.	City:	Frankfort	State:	KY	Zip Code:	40601				
Email: (if individual)										
Phone:	(502) 223-7641									
Technical Contact										
Name:	Andrew Leet									
Title:	Environmental Engine	er								
Mailing Address:	Street or P.O. Box: 113 Great Buffalo Trace									
maning ruuress.	City:	Frankfort	State:	KY	Zip Code:	40601				
Email:	aleet@buffalotrace.com	m								
Phone:	(859) 705-8187									
Air Permit Contact fo	or Source									
Name:	Andrew Leet									
Title:	Environmental Engine	er								
Mailing Address:	Street or P.O. Box:	113 Great Buffal	lo Trace							
maning radii ess.	City:	Frankfort	State:	KY	Zip Code:	40601				
Email:	aleet@buffalotrace.com	m								
Phone:	(859) 705-8187									

Section AI.3: Ov	vner Information			
☑ Owner same	e as applicant			
Name:				
Title:				
Mailing Address:	Street or P.O. Box:  City:	State:	Zip Code:	
Email:				
Phone:				
List names of owners a	nd officers of the company who	have an interest in the company of 5% or 1	nore.	
	Name	1	Position	
	Wholly-owned s	subsidiary of the Sazerac Company; New	Orleans, LA	
				,

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Section AI.4: Ty	pe of Application					
Current Status:	✓ Title V ☐ Conditional	Major	rigin	General Permit	☐ Registrati	on None
Requested Action: (check all that apply)			Initial Registration		☐ Initial Sou	ative Permit Amendment arce-wide OperatingPermit lant Relocation Notice and of Existing Facilities
Requested Status:	✓ Title V ☐ Conditional	Major State-O	rigin	☐ PSD ☐ NSR	Other	:
Pollutant:	c Compounds (VOC)	Al emissions?  Requested Limit:		Yes ✓ No  Pollutant:  Single HAP  Combined HAPs  Air Toxics (40 CFF)  Carbon Dioxide  Greenhouse Gases (  Other	•	Requested Limit:
_	ction: rt Date of Construction: (MM/YYYY)			Proposed Operation Start-Up Da	ate: (MM/YYYY)	
	s: rt Date of Modification: (MM/YYYY)			Proposed Operation Start-Up Da	ate: (MM/YYYY)	
Applicant is seeki	ng coverage under a permit sl	nield. Yes	7	7		ents for which permit shield is ent to the application.

Section AI.5 Other Required Information								
Indicate the documents at	Indicate the documents attached as part of this application:							
□ DEP7007A Indirect Heat Exchangers and Turbines □ DEP7007B Manufacturing or Processing Operations □ DEP7007C Incinerators and Waste Burners □ DEP7007F Episode Standby Plan □ DEP7007J Volatile Liquid Storage □ DEP7007K Surface Coating or Printing Operations □ DEP7007L Mineral Processes □ DEP7007M Metal Cleaning Degreasers □ DEP7007N Source Emissions Profile □ DEP7007P Perchloroethylene Dry Cleaning Systems □ DEP7007R Emission Offset Credit □ DEP7007S Service Stations	DEP7007CC Compliance Certification DEP7007DD Insignificant Activities DEP7007EE Internal Combustion Engines DEP7007FF Secondary Aluminum Processing DEP7007GG Control Equipment DEP7007HH Haul Roads Confidentiality Claim Ownership Change Form Secretary of State Certificate Flowcharts or diagrams depicting process Digital Line Graphs (DLG) files of buldings, roads, etc.							
□ DEP7007T Metal Plating and Surface Treatment Operations □ DEP7007V Applicable Requirements and Compliance Activities □ DEP7007Y Good Engineering Practice and Stack Height Determination □ DEP7007AA Compliance Schedule for Non-complying Emission Units □ DEP7007BB Certified Progress Report  Section AI.6: Signature Block	☐ Map or drawing depicting location of facility   ☐ Safety Data Sheet (SDS)   ☐ Emergency Response Plan   ☐ Other:							
I, the undersigned, hereby certify under penalty of law, that I an familiar with, the information submitted in this document and al responsibility for obtaining the information, I certify that the inf	n a responsible official*, and that I have personally examined, and am li its attachments. Based on my inquiry of those individuals with primary formation is on knowledge and belief, true, accurate, and complete. I am incomplete information, including the possibility of fine or imprisonment.  10/4/2019  Date							
Harlen Wheatley Type or Printed Name of Signatory	Master Distiller							
*Responsible official as defined by 401 KAR 52:001.	Title of Signatory							

Section AI.7: Note	s, Comments, and	d Explanations	S		

DEP7007AI

11/2018

Division for Air Quality	DEP7007J	Additional Documentation			
Bivision for the Quality	Volatile Liquid Storage	Complete DEP7007AI, DEP7007N,			
300 Sower Boulevard	Section J.1: General Information	DEP7007V, and DEP7007GG.			
Frankfort, KY 40601	Section J.2: Tank Description	SDS attached			
(502) 564-3999	Section J.3: Gasoline Plants and Terminals				
	Section J.4: Loading Rack(s)				
	Section J.5: Equipment Leaks				
	Section J.6: Notes, Comments, and Explana	tions			
Source Name: Buffalo Tra	ce Distillery, Inc.				
KY EIS (AFS) #: 21-073-000	09				
Permit #: <u>V-12-056</u>					
Agency Interest (AI) ID: 1373					
Date: <u>10/4/2019</u>					

### Section J.1: General Information

Emission Unit#	Emission Unit Name	Emission Unit Description	Proposed/Actual Date of Construction Commencement (MM/YYYY)	Date of modification/ reconstruction	Control Device ID	Stack ID
17_001	Thunder Gas Tank	Gasoline Dispensing Tank 01	Existing	N/A	N/A	N/A
17_002	Farm Gas Tank	Gasoline Dispensing Tank 02	Existing	N/A	N/A	N/A

#### Section J.2: Tank Description

Emission Point #: 17

**Emission Point Name:** Thunder Gas Tank

Tank ID#: 17\_001

Date Installed: Existing

List Applicable Regulations: 40 CFR 63 Subpart CCCCCC

#### J.2A: Stored Liquid Data:

Maximum Annual		Liquid	Liquid Molecular Weight of	Percent Composition of	Temper		Vapor Pressure (psia)	
Single or Multi-Component Liquid Name(s)	Throughput (gal/yr)	<b>Density</b> (lb/gal)	Single or Multi- Component Liquid	Multi-Component Liquid(s)	Minimum	Maximum	Minimum	Maximum
Gasoline	98,100	5.60	92	N/A	51.84	62.12	5.95	7.23

J.2B: Tank Data:									
Tank Capacity: (gallons)		1,120	_	Shell Height/ Length: (ft) 6.3	Shell Diameter:	5.5	Tank Turnovers per Year:	88	_
Tank Orientation:	✓ Horizo	ontal	☐ Vertical	If Vertical, provi	de Maximum L	iquid Height:		Average	Liquid Height: (ft) 2.8
Shell Color/Shade:	Red	✓ White	Light Gray	☐ Medium Gray	Aluminu	ım Specular	Aluminum D	iffuse	Other:
Roof Color:	☐ Slack	☐ White	Light Gray	☐ Medium Gray	Aluminu	ım Specular	Aluminum D	iffuse	Other: _ N/A
Tank Type:	✓ Fixed	Roof	Internal Flo	oating Roof	☐ External	Floating Ro	of	Pressure	Tank
J.2C: For Fixed Ro	J.2C: For Fixed Roof Tanks:								
Roof Type: (N/A)	☐ Dome	☐ Flat	Cone	Dome/Cone Height:	N/A	_ft	Average Vapo Height:	r Space	2.0 ft
Is Tank Underground?	: Yes	☑ No		Roof Condition: (N/A)	Good	Poor	Vacuum Settii	ıg:	-0.03 psig
Is Tank Heated?:	☐ Yes	✓ No		<b>Shell Condition:</b>	✓ Good	Poor	Pressure Setti	ng:	psig
J.2D: For All Inter	nal Float	ing Roof Ta	nks:						
Rim Seal Description:			unted Primary	☐ Vapor Mounted Prima	-		Shoe Mounte		ndary Seal
Secondary Seal:		Rim Moun	ted	☐ Shoe Mounted	☐ None				
Internal Shell Conditio	n:	Light Rust	☐ Den	se Rust Gunite-	lined	External S	Shell Condition:	Good	☐ Poor
Roof Paint Condition:		Good	Poor			Self Suppo	orting Roof?	Yes	☐ No
Number of Support Columns: ft				ft					

J.2E: Deck Data fo	r Internal Floating I	Roofs:					
Length of Deck Seam:		ft					
Deck Type:	☐ Bolted	Welded					
Type of Deck Fitting:	Access Hatch	Ladder Well	☐ Sample I	Pipe 🔲	Sample Well	☐ Vacuum Br	eaker
VF g.	Column Well	☐ Roof Leg	Hanger V	Well	Stub Drain	Automatic (	Gauge Float Well
Design of each deck fit (diameter sizes, bolted or g adjustable or fixed roof leg	gasket covers, sliding cover o	r fabric seal,					
J.2F: For All Exter	nal Floating Roof T	anks:					
Rim Seal Description:	-	ounted Primary	□ Vapor Mounted Primary Rim Secondary Seal       □ Vapor Mounted Primary with Weather Shield         □ Liquid Mounted Primary Rim Secondary Seal       □ Liquid Mounted Primary with Weather Shield         □ Shoe Mounted Primary Shoe Secondary       □ Shoe Mounted Primary Shoe Secondary				
Internal Shell Condition	on: Light Rust	<del></del>	Gunite-li	ned			
Tank Type:	☐ Riveted	Welded					
Roof Type:	Pontoon R	Roof Doi	uble Deck Roof				
J.2G: Deck Data fo	or External Floating	Roof Tanks:					
Type of Deck Fitting:	Access Ha		ige Hatch	Sample Well	☐ Roof Leg		Vacuum Breaker
	Guide Pol	e ∐Gau	ige Float	Roof Drain	Rim Vent		Other
(diameter sizes, bolted or	gn of each deck fitting: gasket covers, sliding cover, d or fixed roof leg and numbe						

#### J.2H: Emissions Data:

Attach SDS/Composition Analysis for Each Component Listed (See Attachment B for Gasoline Composition Information)

Process ID	Component Name	Process Name (e.g. Breathing, Working, Cleaning, Flashing Loss(es))	Lost Emissions (lb/1000 gal)	Frequency of Occurrence	Determination Methodology for Each Type of Loss*
01	Gasoline	Breathing Losses	2.46	Daily	TankESP (AP-42 Section 7.1 Methodology)
02	Gasoline	Working Losses	3.65	Daily	TankESP (AP-42 Section 7.1 Methodology)
03	Gasoline	Loading Losses	11.70	Daily	AP-42 Section 5.2

#### Section J.2: Tank Description

Emission Point #: 17

**Emission Point Name:** Farm Gas Tank

Tank ID#: 17\_002

**Date Installed:** Existing

List Applicable Regulations: 40 CFR 63 Subpart CCCCCC

#### J.2A: Stored Liquid Data:

	Maximum Annual	Liquid	Molecular Weight of	Percent Composition of	Temper			Pressure ia)
Single or Multi-Component Liquid Name(s)	Throughput (gal/yr)	Density (lb/gal)	Single or Multi- Component Liquid	Multi-Component Liquid(s)	Minimum	Maximum	Minimum	Maximum
Gasoline	21,900	5.60	92	N/A	53.56	71.32	6.15	8.54

J.2B: Tank Data:										
Tank Capacity: (gallons)		250	_	Shell Height/ Length: (ft) 5.3	Shell Diameter:	2.8	Tank Turnovers per Year:	88		
Tank Orientation:	☑ Horizo	ontal	☐ Vertical	If Vertical, prov	ide Maximum L	iquid Height		Average	e Liquid Height	
Shell Color/Shade:	Red	☐ White	Light Gray	☐ Medium Gray	Aluminu	ım Specular	Aluminum I	Diffuse	Other:	Dark Green
Roof Color:	☐ Slack	☐ White	Light Gray	☐ Medium Gray	Aluminu	ım Specular	Aluminum I	Diffuse	Other:	N/A
Tank Type:	✓ Fixed	Roof	Internal Flo	pating Roof	☐ External	Floating Ro	of	Pressure	e Tank	
J.2C: For Fixed Ro	of Tanks	•								
Roof Type: (N/A)	☐ Dome	☐ Flat	Cone	Dome/Cone Height:	N/A	_ft	Average Vape Height:	or Space	2.00	_ft
Is Tank Underground?	: Yes	☑ No		<b>Roof Condition:</b> (N/A)	☐ Good	Poor	Vacuum Setti	ng:	-0.03	_psig
Is Tank Heated?:	☐ Yes	✓ No		Shell Condition:	☑ Good	Poor	Pressure Sett	ing:	0.03	_psig
J.2D: For All Inter	nal Floati	ing Roof Ta	nks:							
Rim Seal Description:		_ ^	unted Primary	☐ Vapor Mounted Prima		-	☐ Shoe Mount		ondary Seal	
Secondary Seal:		Rim Moun	ted	☐ Shoe Mounted	☐ None					
Internal Shell Conditio	n:	Light Rust	☐ Den	se Rust Gunite	-lined	External S	Shell Condition:	Good	Poor	
Roof Paint Condition:		Good	Poor			Self Suppo	orting Roof?	Yes	☐ No	
Number of Support Co	lumns:		_			Effective (	Column Diamete	r:	ft	

J.2E: Deck Data fo	r Internal Floating Ro	oofs:					
Length of Deck Seam:		ft					
Deck Type:	Bolted	Welded					
Type of Deck Fitting:	Access Hatch	Ladder Well	l Sample	Pipe	ample Well	☐ Vacuum Breaker	
Type of Deck Fitting.	Column Well	☐ Roof Leg	Hanger	Well S	tub Drain	☐ Automatic Gauge Float	Well
Design of each deck fit (diameter sizes, bolted or g adjustable or fixed roof leg	gasket covers, sliding cover or	fabric seal,					
J.2F: For All Exter	nal Floating Roof Ta	nks:					
Rim Seal Description:	☐ Vapor Mour ☐ Liquid Mou ☐ Shoe Moun	nted Primary	☐ Vapor Mounted Primar ☐ Liquid Mounted Primar ☐ Shoe Mounted Primary	y Rim Secondary Seal	Liquid Mo	unted Prmary with Weather Sh unted Primary with Weather S nted Primary Shoe Secondary	
Internal Shell Condition	Light Rust	☐ Dens	se Rust	ined			
Tank Type:	Riveted	Welded					
Roof Type:	Pontoon Ro	of [	Double Deck Roof				
J.2G: Deck Data fo	or External Floating R	Roof Tanks:					
Type of Deck Fitting:	☐ Access Hate ☐ Guide Pole	ch   	☐ Gauge Hatch ☐ Gauge Float	☐ Sample Well ☐ Roof Drain	☐ Roof Leg ☐ Rim Vent	☐ Vacuum ☐ Other	Breaker
(diameter sizes, bolted or	gn of each deck fitting: gasket covers, sliding cover, und d or fixed roof leg and number						

#### J.2H: Emissions Data:

Attach SDS/Composition Analysis for Each Component Listed (See Attachment B for Gasoline Composition Information)

Process ID	Component Name	Process Name (e.g. Breathing, Working, Cleaning, Flashing Loss(es))	Lost Emissions (lb/1000 gal)	Frequency of Occurrence	Determination Methodology for Each Type of Loss*
01	Gasoline	Breathing Losses	6.54	Daily	TankESP (AP-42 Section 7.1 Methodology)
02	Gasoline	Working Losses	2.24	Daily	TankESP (AP-42 Section 7.1 Methodology)
03	Gasoline	Loading Losses	11.70	Daily	AP-42 Section 5.2

Section J.3: G	Gasoline Pla	nts and Te	rminals									
Indicate the perce	ntage of one or	· more of the fo	llowing modes o	of transportat	ion for incomin	g liquid and o	utgoing liquid:					
	Tank Truck	Trailer	Railcar	Pipeline	Marine Tank	Barge	Other (Sp	ecify)				
Incoming Liquid Material:	100%											
Outgoing Liquid Material:												
For Gasoline Dispensing Facilities (GDF) only:												
Is the loading of gasoline storage tanks at a GDF located at an area source of hazardous air pollutants as defined in 40 CFR 63.2?												
	Is there the dispensing of gasoline from a fixed storage tank at a GDF into a portable tank for the on-site delivery and subsequent dispensing into gasoline-fueled equipment?											
Maximum monthly t	throughput in ga	llons:	<10,000	gal/mo	-							
For Bulk Gasolin	e Plants Only	:										
Is the maximum calc	Is the maximum calculated design throughput less than 20,000 gallons (75,700 liters) per day?											
Is gasoline loaded into cargo tanks for transport to gasoline dispensing facilities?												
For Bulk Gasolin	e Terminals C	only:										
Is the maximum calc	culated design th	roughput equal t	o or greater than	20,000 gallons	(75,700 liters) p	er day?		Yes	☐ No			

Is the terminal located at an area source of hazardous air pollutants as defined in 40 CFR 63.2?	Yes	☐ No
Does the facility load from marine tank vessel loading operations at all loading berths less than 1.6 billion liters (10 M barrels) of gasoline annually and of less than 32 billion liters (200 M barrels) of crude oil annually?	Yes	☐ No
Does the terminal handle any reformatted or oxygenated gasoline containing methyl tertbutyl ether (MTBE), CF?	Yes	☐ No
Indicate the type of vapor control device utilized:   Incinerator   Adsorber   Other		

Section J.6: Notes, Comments, and Explanations							
	Sections J.4 and J.5 are not applicable to BTD						

#### Division for Air Quality

300 Sower Boulevard Frankfort, KY 40601 (502) 564-3999

#### **DEP7007N**

#### Source Emissions Profile

Section N.1: Emission SummarySection N.2: Stack Information

\_\_ Section N.3: Fugitive Information

\_\_ Section N.4: Notes, Comments, and Explanations

A	dditio	nal D	ocun	nenta	tion

Complete DEP7007AI

Source Name: Buffalo Trace Distillery, Inc.

KY EIS (AFS) #: 21-073-00009

Permit #: V-12-056

Agency Interest (AI) ID: 1373

Date: 10/4/2019

#### N.1: Emission Summary

							Maximum Design		Uncontrolled	Emission Factor Source			Hourly E	missions	Annual E	missions
Emission	Emission	Process	Process	Device	Control Device	Stack	Capacity (SCC		Factor	(e.g. AP-42, Stack Test, Mass	Efficiency	Control Efficiency	Potential	Potential	Uncontrolled Potential	Controlled Potential
Unit # 17_001	Unit Name Thunder Gas Tank	01	Name Breathing Losses	Name NA	NA NA	NA NA	0.011	<b>Pollutant</b> VOC	(lb/SCC Units) 2.46	Balance) TankESP, AP-42 Section 7.1	100.00%	0.00%	( <i>lb/hr</i> ) 0.028	( <i>lb/hr</i> ) 0.028	(tons/yr) 0.120	(tons/yr) 0.120
		02	Working Losses	NA	NA	NA	0.011	VOC	3.65	TankESP, AP-42 Chapter 7	100.00%	0.00%	0.041	0.041	0.179	0.179
		03	Loading Losses	NA	NA	NA	0.011	VOC	11.70	AP-42 Section 5.2	100.00%	0.00%	0.131	0.131	0.574	0.574
17_002	Farm Gas Tank	01	Breathing Losses	NA	NA	NA	0.003	VOC	6.54	TankESP, AP-42 Section 7.1	100.00%	0.00%	0.016	0.016	0.072	0.072
		02	Working Losses	NA	NA	NA	0.003	VOC	2.24	TankESP, AP-42 Chapter 7	100.00%	0.00%	0.006	0.006	0.024	0.024
		03	Loading Losses	NA	NA	NA	0.003	VOC	11.70	AP-42 Section 5.2	100.00%	0.00%	0.029	0.029	0.128	0.128

## Section N.2: Stack Information

#### **UTM Zone:**

	Identify all Emission Units (with Process	Sta	ck Physical I	Data	Stack UTM	Coordinates	Stack Gas Stream Data			
Stack ID	ID) and Control Devices that Feed to Stack	Equivalent Diameter	Height	Base Elevation	Northing (m)	Easting (m)	Flowrate (acfm)	Temperature	Exit Velocity  (ft/sec)	
State IB	~ wen	U-7	0.7	Tank Vents Onl	1 1	()	(J/11)	( 1)	0500)	
					,					

## **Section N.3: Fugitive Information**

#### Zone:

			·		Area UTM	Coordinates	Area Release Data			
Emission Unit#	Emission Unit Name	Process ID	Length of the X Side (ft)	Length of the Y Side (ft)	Northing (m)	Easting (m)	Release Temperature (°F)	Release Height		

Section N.4: Notes, Comments, and Explanations								

**Additional Documentation** 

Complete DEP7007AI

#### Division for Air Quality

300 Sower Boulevard Frankfort, KY 40601 (502) 564-3999

### **DEP7007V**

# Applicable Requirements and Compliance Activities

 Section V.1: Emission and Operating Limitation(s
 Section V.2: Monitoring Requirements
 Section V.3: Recordkeeping Requirements
 Section V.4: Reporting Requirements
Section V.5: Testing Requirements

Section	V.6: ]	Notes.	Comments,	and Ex	colanations
 ~		,			-p

Source Name:	Buffalo	Trace	Distillery,	Inc.

**KY EIS (AFS) #:** 21-073-00009

**Permit #:** V-12-056

Agency Interest (AI) ID: 1373

Date: 10/4/2019

#### Section V.1: Emission and Operating Limitation(s)

Emission Unit #	Emission Unit Description	Applicable Regulation or Requirement	Pollutant	Emission Limit (if applicable)	Voluntary Emission Limit or Exemption (if applicable)	Operating Requirement or Limitation (if applicable)	Method of Determining Compliance with the Emission and Operating Requirement(s)
17_001	Thunder Gas Tank	40 CFR 63.11115(a)	na	na	na	emissions.	Follow standard operating procedures for tank loading and dispensing operations, including the applicable practices required by 40 CFR 63.11116.
17_002	Farm Gas Tank	40 CFR 63.11115(a)	na	na	na	in a manner consistent with safety and good air pollution control practices for minimizing emissions.	Follow standard operating procedures for tank loading and dispensing operations, including the applicable practices required by 40 CFR 63.11116.
17_001	Thunder Gas Tank	40 CFR 63.11116(a)	na	na	na		Follow standard operating procedures for tank loading and dispensing operations.

Emission Unit #	Emission Unit Description	Applicable Regulation or Requirement	Pollutant	Emission Limit (if applicable)	Voluntary Emission Limit or Exemption (if applicable)	Operating Requirement or Limitation (if applicable)	Method of Determining Compliance with the Emission and Operating Requirement(s)
17_002	Farm Gas Tank	40 CFR 63.11116(a)	na	na	na	Minimize gasoline spills.	Follow standard operating procedures for tank loading and dispensing operations.
17_001	Thunder Gas Tank	40 CFR 63.11116(a)	na	na	na	Clean up spills as expeditiously as practicable.	Follow standard operating procedures for cleaning spills.
17_002	Farm Gas Tank	40 CFR 63.11116(a)	na	na	na	Clean up spills as expeditiously as practicable.	Follow standard operating procedures for cleaning spills.
17_001	Thunder Gas Tank	40 CFR 63.11116(a)	na	na	na	Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use.	Follow standard operating procedures for tank loading and dispensing operations.
17_002	Farm Gas Tank	40 CFR 63.11116(a)	na	na	na	Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use.	Follow standard operating procedures for tank loading and dispensing operations.
17_001	Thunder Gas Tank	40 CFR 63.11116(a)	na	na	na	Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices.	Follow standard operating procedures for tank loading and dispensing operations.
17_002	Farm Gas Tank	40 CFR 63.11116(a)	na	na	na	Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices.	Follow standard operating procedures for tank loading and dispensing operations.

Section V	Section V.2: Monitoring Requirements						
Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Monitored	Description of Monitoring		

## Section V.3: Recordkeeping Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Recorded	Description of Recordkeeping
17_001	Thunder Gas Tank		40 CFR 63.11125(d)		Records of the occurrence and duration of each malfunction of operation or the air pollution control and monitoring equipment.
17_002	Farm Gas Tank		40 CFR 63.11125(d)		Records of the occurrence and duration of each malfunction of operation or the air pollution control and monitoring equipment.
17_001	Thunder Gas Tank		40 CFR 63.11125(d)		Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.11115(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
17_002	Farm Gas Tank		40 CFR 63.11125(d)		Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.11115(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
17_001	Thunder Gas Tank		40 CFR 63.11116(b)		The permittee must have records available within 24 hours of a request by the Administrator to document gasoline throughput.
17_002	Farm Gas Tank		40 CFR 63.11116(b)		The permittee must have records available within 24 hours of a request by the Administrator to document gasoline throughput.

## Section V.4: Reporting Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Reported	Description of Reporting
17_001	Thunder Gas Tank		40 CFR 63.11111(e)		The permittee shall, upon request by the Administrator, demonstrate that their monthly throughput is less than the 10,000-gallon threshold level.
17_002	Farm Gas Tank		40 CFR 63.11111(e)		The permittee shall, upon request by the Administrator, demonstrate that their monthly throughput is less than the 10,000-gallon threshold level.
17_001	Thunder Gas Tank		40 CFR 63.11126(b)		The permittee shall report, by March 15 of each year, the number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year. No report is necessary for a calendar year in which no malfunctions occurred.
17_002	Farm Gas Tank		40 CFR 63.11126(b)		The permittee shall report, by March 15 of each year, the number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year. No report is necessary for a calendar year in which no malfunctions occurred.
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Section V	Section V.5: Testing Requirements							
Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Tested	Description of Testing			

1/2018	DEP7007V
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Section V.6: Notes, Comments, and Explanations				
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## ATTACHMENT B

**Emission Calculations** 

Table B-1.1. GDF Tank Parameters

Tank Parameters	Thunder Gas Tank (EU 17_001)	Farm Gas Tank (EU 17_002)
Diameter (ft)	5.5	2.8
Length (ft)	6.3	5.3
Volume (gallons)	1,120	250
Roof Type	Horizontal	Horizontal
Shell Finish	White	Dark Green
Shell Condition	Average	Good
Roof Finish	N/A	N/A
Roof Condition	N/A	N/A
Stock	Gasoline	Gasoline
Maximum Throughput (gal/mo) <sup>1</sup>	8,175	1,825
Maximum Throughput (gal/yr)	98,100	21,900

<sup>&</sup>lt;sup>1</sup> Potential emissions from the GDF at Buffalo Trace's Distillery (BTD) are based on a maximum throughput of 10,000 gallons of gasoline per month. By maintaining the throughput below this threshold, the GDF is subject to the requirements of 40 CFR 63.11116. If this monthly gasoline throughput rate is exceeded, the more burdensome requirements of 40 CFR 63.11117 would apply.

Table B-1.2. Gasoline Stock Information (from TankESP)

Stock Parameters	TankESP Input
Stock Name	Gasoline RVP_X
Stock Abbreviation	GAS_X
MWL	92
MWV	66
Liquid Density (lb/gal)	5.6
Distillation Slope	3
RVP <sup>1</sup>	13
Composition	•
Benzene	1.80%
Benzo(g,h,i)perylene	0.00%
Cumene (isopropylbenzene)	0.50%
Cuclohexane	0.24%
Ethylbenzene	1.40%
Hexane (n-)	1.00%
Iso-octane (2,2,4 trimethylpentane	4.00%
Naphthalene	0.42%
PACs (Chrysene)	0.00%
Toluene	7.00%
Trimethylbenzene (1,2,4)	2.50%
Xylene	7.00%

<sup>&</sup>lt;sup>1</sup> Potential emissions are calculated in TankESP assuming that the gasoline distributed by the GDF at BTD is conservatively represented by RVP 13.

Table B-1.3. Potential Emissions from GDF Tanks

VOC Emissions	Thunder Gas Tank (EU 17_001)	Farm Gas Tank (EU 17_002)	Total			
Estimated standing losses (lbs/yr)	241	143	384			
Estimated working losses (lbs/yr)	358	49.0	407			
Total VOC emissions (lbs/yr)	599	192	792			
Total VOC emissions (tpy)	0.300	0.096	0.396			
Speciated Emissions (lb/yr)						
Benzene	2.47	0.831	3.30			
Cumene (isopropyl benzene)	0.027	0.010	0.037			
Cyclohexane	0.341	0.114	0.455			
Ethylbenzene	0.166	0.058	0.224			
Hexane (n-)	2.25	0.751	3.00			
Iso-octane {2,2,4 trimethyl pentane}	2.78	0.943	3.72			
Naphthalene	0.001	4.07E-04	0.002			
Toluene	2.68	0.921	3.60			
Trimethyl benzene (1,2,4)	0.058	0.021	0.078			
Xylene	0.723	0.254	0.977			
HAP Emissions						
Total HAP emissions (lb/yr)	11.1	3.77	14.9			
Total HAP emissions (tpy)	0.006	0.002	0.007			

#### B-2. GDF Emissions - Loading Losses

Table B-2.1. Emissions from Loading Losses

		Emission Factors <sup>1</sup>				Dotontial	Potential Gasoline	
Potential Gasoline Usage <sup>2</sup>		Vehicle Refuling (no control)	Vehicle Refuling Spillage	Splash Filling Underground Storage Tank	Underground Tank Breathing and Emptying	Overall Emission Factor	Potential Gasoline Dispensing VOM emissions	Dispensing
(1,000 gal/hr)	(1,000 gal/yr)	(lbs OC/1000 gal)	(lbs OC/1000 gal)	(lbs OC/1000 gal)	(lbs OC/1000 gal)	(lbs OC/1000 gal)	(lb/hr)	(tpy)
0.014	120.00	11.0	0.7	$NA^3$	$NA^3$	11.70	0.16	0.70
			HAP Concentration	23.12	2%			
						HAP Emissions	0.04	0.16

<sup>1.</sup> Emission factors from AP-42 Section 5.2, Table 5.2-7, Evaporative emissions from gasoline service station operations.

<sup>2.</sup> Maximum annual throughput corresponds to maximum monthly throughput that can be processed before exceeding the more burdensome requirements under NESHAP CCCCC.

<sup>3.</sup> Above ground storage tank - emissions due to standing and loading losses are attributed to the tank rather than to the loading operation. These emissions are presented in Section B-1.

<sup>4.</sup> HAP concentration is based on the vapor speciation of gasoline as shown in the gasoline tank calculations.

## B-3. GDF Emissions - Summary

Table B-3.1. PTE Emissions for GDF Operations

VOC Emissions	Thunder Gas Tank (EU 17_001)	Farm Gas Tank (EU 17_002)	Total
Tank Emissions (tpy)	0.300	0.096	0.396
Loading Emissions (tpy)	0.574	0.128	0.702
Total VOC emissions (tpy)	0.874	0.224	1.10
HAP Emissions			
Tank Emissions (tpy)	0.006	0.002	0.007
Loading Emissions (tpy)	0.133	0.030	0.162
Total HAP emissions (tpy)	0.138	0.032	0.170